

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN C. STENNIS SPACE CENTER
STENNIS SPACE CENTER, MS 39529-6000**

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

1.0 AGENCY CONTRACTING ACTIVITY

National Aeronautics and Space Administration, John C. Stennis Space Center, Office of Procurement, Stennis Space Center, MS 39529

2.0 DESCRIPTION OF ACTION BEING APPROVED

The action being approved is the sole source award to Tyco Valves & Control LP, Pasadena, TX of fourteen (14) Cryogenic and five (5) Isopropyl Alcohol Butterfly Valves for the A3 Altitude Test Stand in support of NASA's Constellation Program. This requirement is considered to be a commercial item. It is anticipated that this requirement will be provided under a firm fixed price contract. The estimated period of performance or lead-time for delivery is nine months.

3.0 DESCRIPTION

The work to be performed under this requirement shall consist of the design, manufacture, and delivery of hard-seated butterfly valves that will enable NASA to safely operate propellant systems on its rocket engine test stands. These butterfly valves shall have the following characteristics:

- Resilient metal to metal seated with solid Nitronic 50 seal ring hard faced with HVOF;
- Valve disc offset in 3 different dimensions (Triple Offset);
- Single piece shaft made of Nitronic 50;
- Valve seat integral to body of valve and stellite overlaid;
- Seat retainer screw heads extending beyond the plane of the disc so that safety wiring is possible;
- Vacuum jacket provided by Eden Cryogenics;
- Non-rubbing through entire 90 degrees of rotation;
- Capable of consistent operation after repeated thermal cycling from 100°F to -423°F;
- Leak rate no more than 1 scfm per minute per inch of nominal valve size;
- Material selection compatible with Liquid Oxygen.

The total estimated cost of this effort is \$1.874M.

4.0 STATUTORY AUTHORITY

The statutory authority permitting other than full and open competition is FAR 6.302-1 and 10 U.S.C. 2304 (c)(1), therefore, being only one responsible source and having no other suppliers or services that will satisfy agency requirements.

5.0 NATURE OF THE ACTION THAT REQUIRES USE OF THE AUTHORITY CITED

The primary justification for negotiating only with Tyco/Vanessa for this procurement is that Vanessa is the industry leader in the manufacture of high technology rotary process valves. Vanessa provides 100% in-house engineering support that includes finite element analysis and computational fluid dynamic capability. Because of the criticality of the valves covered by this procurement, using a manufacturer that provides these simulations prior to manufacturing in order to verify design, tolerances, and material selection is critical. These valves are a very intricate part of the A3 Test Stand, and there is no room for failure. Vanessa's past performance at Stennis Space Center (SSC) is well documented and the valves they have previously provided for identical applications have performed very well. No other company has this capability or track record. Because of this, another manufacturer would not be able to provide the quality product necessary for this application.

6.0 SOLICITATION EFFORTS

The results of the initial market research conducted through the NASA Acquisition Internet Service (NAIS) and the Government wide point of entry (GPE) (FedBizOpps) on July 17, 2007 indicated there were not two or more small businesses qualified to manufacture the valves. Solicitation No. NNS08221455R was issued as unrestricted on October 16, 2007. This solicitation resulted in the receipt of one responsive, two non-responsive and one late proposal from . After the technical evaluation performed on the responsive offer concluded that the contractor was not technically qualified to manufacture the valves, this solicitation was cancelled on January 17, 2008. On March 28, 2008 Solicitation No. NNS08235767R was issued as unrestricted. Again, one responsive, two non-responsive (one being) and one late proposal was received from . The responsive offer was submitted by the same contractor who had submitted a proposal on the previous solicitation. The contractor's technical proposal was evaluated and again the outcome was that the contractor was not technically qualified to provide the valves. Solicitation No. NNS08235767R was cancelled on June 20, 2008.

7.0 COST CERTIFICATION

Tyco will be paid milestone billing payments under this procurement action, which will be determined to be fair and reasonable to the Government based upon established market pricing along with a comparison of the price of the proposal received to the previous solicitations.

8.0 MARKET SURVEY

An announcement was published in the NAIS and FedBizOpps on October 16, 2008 expressing our intent to issue a contract to Tyco for the valves and that all responsible sources may submit a capability statement which shall be considered by the agency.

9.0 OTHER SUPPORTING FACTS

In the first solicitation, contacted the contracting office the morning of the proposal due date, requesting an extension of the due date because the contractor was still attempting to put together their proposal. Because was the only contractor who requested an extension, and at least one proposal had already been received, their request was denied. attempted to submit a proposal in person, however, their representative did not arrive at SSC until 5:00 PM, which was two hours beyond the time for the receipt of proposals, and therefore, their proposal could not be accepted.

 did submit a timely proposal in response to the second solicitation. However, upon opening their proposal, all submitted was a few catalog cut sheets, and pricing. They failed to submit any of the required technical information for evaluation as well as their written certification acknowledging that the SSC Support Contractor would be evaluating their technical proposal. The solicitation specifically stated that offerors' failure to acknowledge this fact, would render their proposal as non-responsive and their proposal would not be evaluated. Therefore proposal was considered non-responsive and not considered for award.

After was notified that their proposal could not be evaluated, they requested a telecom with the contracting officer to discuss their elimination and how they could do a better job on future proposal submissions. The contracting officer went through the proposal submission requirements, and reiterated the importance of signing the acceptance and acknowledgement statement and why we have it in the solicitation in the first place. The contractor admitted that they overlooked the solicitation requirements and that this was a hard lesson learned for them and they will do a better job preparing a proposal the next time.

 has a proven track record of manufacturing these valves for SSC in the past, and therefore, although their proposal preparation department failed to comply with the solicitation requirements, there is no indication that is not technically qualified to manufacture the valves.

10.0 SOURCES EXPRESSING AN INTEREST IN THIS PROCUREMENT

In response to the announcement posted in the NAIS and FedBizOpps on October 16, 2008, SSC received capability statements from three vendors: and . Based upon their submission, it was determined that cannot meet all the requirements posted in the announcement. The sealing method used by does not allow for zero leakage at cryogenic temperatures which poses a concern that the valve performance will deteriorate over time. Another concern with sealing method is that it is necessary to increase the actuator size to achieve valve closing. Increased actuator size poses additional functional risk to the project.

has provided vacuum jacketing services to SSC in the past. However, based upon the information submitted, it was determined that they are a vacuum jacketed piping contractor and they failed to demonstrate how they can meet the requirements.

has provided these types of valves to SSC in the past, under the name . submitted a late proposal in response to the second full and open solicitation for these valves. When it was determined that an award could not be made on the second solicitation because the one responsive offeror was determined to not be technically qualified, late proposal indicated a price for the valves was \$ not including a handling fee to be added to the final order, for a total of \$. The Government Estimate for that procurement (which is the same as this procurement) was \$ and therefore based upon their recently quoted prices, price would be more than 400% above the Government Estimate. Also, their delivery time was one year from receipt of order, and the solicitation stated a nine month delivery date. Based on this recent pricing and performance information, it is determined that there is no reasonable expectation award could be made to .


Based on this analysis, it is determined that only one source can provide these valves.

11.0 AGENCY ACTIONS TO REMOVE BARRIERS

There were no barriers to remove in this instance. SSC had no intention to sole source these valves as shown by the extreme efforts undertaken to procure these valves through two full and open competition solicitations.

12.0 TECHNICAL REPRESENTATIVE CERTIFICATIONS

I certify that the anticipated price to the Government will be thoroughly evaluated to ensure that it is fair and reasonable prior to award. In addition, I do hereby certify that the support data under my cognizance that are included in this justification are accurate and complete to the best of my knowledge and belief.

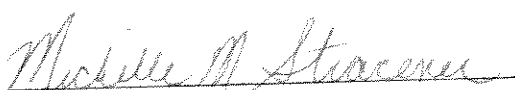

Jonathan C. Dickey
Mechanical Engineer/COTR/EA32

13.0 APPROVE/DISAPPROVE:

I certify that this justification for other than full and open competition is accurate and complete to the best of my knowledge and belief. I further certify that the anticipated costs to the Government will be determined fair and reasonable prior to award.

Pursuant to NFS 1805.207 and 1804.570, this proposed action was published on the NASA Acquisition Internet Service (NAIS) and, pursuant to FAR 5.201, synopsisized in the Government wide point of entry (GPE) (FedBizOpps).

SUBMITTED BY:


Michelle M. Stracener
Contract Specialist/DA10

Date

Jan 12, 2009

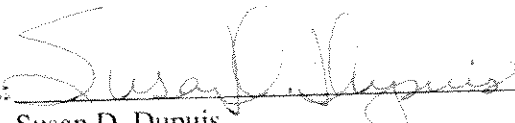
CONCURRENCE:


Robert D. Harris
Contracting Officer/DA00

Date

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CONCURRENCE:


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Date

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APPROVAL:


Patrick E. Scheuermann
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Date

1/13/09